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Claims:

1.-7. (cancelled)

8. (new) A method for remote-controlled testing of a specimen, comprising:

providing data at a control unit and at the specimen in a format that corresponds to a transmission protocol used for an unsecured transmission of the data;

converting the data present in the format corresponding to the transmission protocol used for the unsecured transmission of the data into a format corresponding to a transmission protocol used for a secured transmission of data;

transmitting the data according to the transmission protocol used for the secured transmission of data; and

converting back the data, prior to reception, to a format corresponding to the transmission protocol used for the unsecured transmission of data.

9. (new) The method according to claim 8, wherein

the User Datagram Protocol (UDP) is provided as the transmission protocol used for the unsecured transmission of data, wherein

the Transmission Control Protocol (TCP) is provided as the transmission protocol used for the secured transmission of data, wherein

the data which, when transmitted, is present in a format corresponding to the User Datagram Protocol (UDP) is converted to a format corresponding to the Transmission Control Protocol (TCP), wherein

the data is transmitted according to the Transmission Control Protocol (TCP), and wherein

the data is converted back, prior to reception, to a format corresponding to the User Datagram Protocol (UDP).

10. (new) The method according to claim 8, wherein

the User Datagram Protocol (UDP) is provided as the transmission protocol used for the unsecured transmission of data, and

wherein

the Transmission Control Protocol (TCP) is provided as the transmission protocol used for the secured transmission of data.

- 11. (new) The method according to claim 8, wherein conversion from the unsecured to the secured transmission of data and vice versa takes place in a traffic reliabler device (TRD).
- 12. (new) The method according to claim 9, wherein conversion from the unsecured to the secured transmission of data and vice versa takes place in a traffic reliabler device (TRD).
- 13. (new) The method according to claim 10, wherein conversion from the unsecured to the secured transmission of data and vice versa takes place in a traffic reliabler device (TRD).
- 14. (new) The method according to claim 9, wherein data which is present in the User Datagram Protocol (UDP) is packed into a data packet according to the Transmission Control Protocol (TCP).
- 15. (new) The method according to claim 10, wherein data which is present in the User Datagram Protocol (UDP) is packed into a data packet according to the Transmission Control Protocol (TCP).
- 16. (new) The method according to claim 11, wherein data which is present in the User Datagram Protocol (UDP) is packed into a data packet according to the Transmission Control Protocol (TCP).
- 17. (new) The method according to claim 12, wherein data which is present in the User Datagram Protocol (UDP) is packed into a data packet according to the Transmission Control Protocol (TCP).
- 18. (new) The method according to claim 13, wherein data which is present in the User Datagram Protocol (UDP) is packed into a data packet according to the Transmission Control Protocol (TCP).

19. (new) An arrangement for performing a method for remotecontrolled testing of a specimen, the method comprising:

providing data at a control unit and at the specimen in a format that corresponds to a transmission protocol used for an unsecured transmission of the data;

converting the data present in the format corresponding to the transmission protocol used for the unsecured transmission of the data into a format corresponding to a transmission protocol used for a secured transmission of data;

transmitting the data according to the transmission protocol used for the secured transmission of data; and

converting back the data, prior to reception, to a format corresponding to the transmission protocol used for the unsecured transmission of data,

and wherein the arrangement comprising:

two modules, arranged between the control unit and specimen, for converting the data from a format corresponding to the transmission protocol used for the unsecured transmission of data to a format corresponding to a transmission protocol used for the secured transmission of data, and vice versa; and

a data transmission line for transmitting data according to the transmission protocol used for the secured transmission of data, wherein the data transmission line is arranged between two modules.

20. (new) The arrangement according to claim 19, wherein the modules are traffic reliabler devices (TRD), wherein two traffic reliabler devices (TRD) are arranged between the control unit and the specimen, and wherein

a data transmission line for transmitting data according to the Transmission Control Protocol (TCP) is arranged between the two traffic reliabler devices (TRD).

21. (new) The arrangement according to claim 20, wherein a traffic reliabler device (TRD) is arranged directly at the site of the

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control unit and a further traffic reliabler device (TRD) is arranged directly at the site of the specimen.

- 22. (new) An arrangement for performing a method for remotecontrolled testing of a specimen, comprising:
 - a control unit for sending data to the specimen;

two modules, arranged between the control unit and the specimen, for converting the data from a format corresponding to the transmission protocol used for the unsecured transmission of data to a format corresponding to a transmission protocol used for the secured transmission of data, and vice versa; and

- a data transmission line for transmitting data according to the transmission protocol used for the secured transmission of data, wherein the data transmission line is arranged between two modules.
- 23. (new) The arrangement according to claim 22, wherein the modules are traffic reliabler devices (TRD), wherein two traffic reliabler devices (TRD) are arranged between the control unit and the specimen, and wherein
- a data transmission line for transmitting data according to the Transmission Control Protocol (TCP) is arranged between the two traffic reliabler devices (TRD).
- 24. (new) The arrangement according to claim 23, wherein a traffic reliabler device (TRD) is arranged directly at the site of the control unit and a further traffic reliabler device (TRD) is arranged directly at the site of the specimen.